

Claims

1. An isolated DNA molecule comprising a MIP synthase promoter

2. An isolated DNA molecule of claim 1 comprising
5 base pairs 7-2064 of SEQ ID NO:2, or a fragment, genetic variant or deletion of such a sequence that retains the ability of functioning as a promoter in plant cells.

3. A fragment, genetic variant or deletion of the molecule of claim 3 that comprises at least 200
10 consecutive base pairs identical to 200 consecutive base pairs of the sequence defined by base pairs 7-2064 of SEQ ID NO:2.

4. An isolated DNA molecule having a 20 base pair nucleotide portion identical in sequence to a 20
15 consecutive base pair portion of the sequence set forth in base pairs 7-2064 of SEQ ID NO:2.

5. A DNA construct comprising a promoter operably linked to a heterologous nucleic acid sequence, wherein the promoter selectively hybridizes to SEQ ID NO:2.

20 6. A DNA construct of claim 5 wherein the promoter comprises base pairs 7-2064 of SEQ ID NO:2.

7. A method of expressing a heterologous nucleic acid sequence in a plant comprising:

a) introducing into a plant cell a vector comprising
25 a MIP synthase promoter operably linked to the heterologous nucleic acid sequence; and

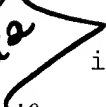
b) regenerating a plant from said cell.

8. A method of producing seed comprising:

a) introducing into a plant cell a vector comprising a MIP synthase promoter operably linked to a heterologous nucleic acid sequence;

b) regenerating a plant from said cell; and

5 c) sexually transmitting said MIP synthase promoter operably linked to said heterologous nucleic acid sequence to progeny.

Def Ca  9. The method of producing seed of claim 8 including the additional step collecting the seed
10 produced by said progeny.

10. A transformed plant comprising at least one plant cell that contains a DNA construct of claim 5.

11. Seed or grain that contains a DNA construct of
15 claim 5.

*add
a3* 

*add
D1* 